



REMARKS

Applicants thank the Examiner for the thorough consideration given the present application. Claims 1 and 2 are currently being prosecuted. The Examiner is respectfully requested to reconsider his rejection in view of the amendments and remarks as set forth below.

ENTRY OF AMENDMENT

It is respectfully requested that the present member should be entered into the official file in view of the fact that the amendments to the claims automatically place the application in condition for allowance. Alternately, if the Examiner does not agree that the application is in condition for allowance, it is respectfully requested that the present amendment be entered for the purpose of the appeal. The only change to the claims involves the removal of a word which the Examiner has indicated is indefinite and the substitution of a phrase in the same place to make this language more clear. Accordingly, since this language is used to overcome the 35 U.S.C. § 112, second paragraph rejection, Applicants submit that the entry of the amendment and full consideration thereof is appropriate.

REJECTION UNDER 35 U.S.C. § 112

Claims 1 and 2 stand rejected under 35 U.S.C. § 112 as being indefinite. The Examiner objects to the term “lower” as not being defined by the claim and as being unclear. By way of the present amendment Applicants have now referred to “a link layer or network layer”. As is known, the OSI model includes a seven layer arrangement which includes a network layer and a data link layer. These layers are specifically mentioned for example on page 4, lines 18 and 21. Accordingly, Applicants submit that basis for this phrase is supported by the specification.

REJECTION UNDER 35 U.S.C. § 103

Claims 1 and 2 stand rejected under 35 U.S.C. § 103 as being obvious over Mizutani et al. (U.S. Patent 6,798,757) in view of Walsh et al. (Hybrid Networks-A Step Beyond 3G). This rejection is respectfully traversed.

The Examiner states that Mizutani et al. shows a mobile manager 34 that keeps track of the movement of mobile stations outside a common core network and a resource manager 52 that administers resource usage in a common core network. The Examiner believes that the common core network 30 is a homogeneous mobile network system and supports mobile stations roaming within homogeneous common core network. The common core network enables internet access via a gateway router access to a base station containing a base station interface. The Examiner admits that Mizutani et al. does teach the common core network supporting roaming between heterogeneous radio communication networks based on a lower network layer.

The Examiner relies on Walsh et al. to teach a common core network supporting roaming between heterogeneous radio communication networks based on a lower network layer while ensuring service quality. The Examiner feels that it would have been obvious to one of ordinary skill in the art to modify the system of Mizutani et al. to include the common core networks supporting roaming as taught by Walsh.

Concerning the Walsh et al. reference, Applicants wish to point out that Fig. 5 referenced by the Examiner refers to the section immediately proceeding title Model 4- Common Core. However, the second paragraph of this short section states that the significant disadvantage of the scheme is that different network cores must converge and this must be proceeded by the standardization effort and business commitment to support it. In other words, the reference is saying that this problem has not been solved and accordingly, Applicants submit that this arrangement is merely envisioned and that such a system therefore not taught by the reference. The reference does not teach a viable system, but only a concept which the reference admits is not yet workable. Such a non-working example does not appear to be sufficient to base the rejection on. Thus, the reference only teaches the general concept of a common core network connect to two radio accesses at one end and the internet at the other end. This general concept is shown in general in Fig. 1C of the present application. However, the present application continues with a description on how this can operate rather than merely being left at the concept stage. It is further pointed out that this reference has been cited by Applicants in a Information Disclosure Statement on September 17, 2002. Applicants have been aware of this reference and believe that the present application defines there over.

In regard to claim 1, the present invention is described as a system for integrating wireless communication systems. Specifically, claim 1 describes the communication between WANs belonging to the common core network being based on a link layer or network layer of the OSI model. This reduces overhead and improves performance. A challenge of this model is that different WANs should reconverge which requires a standardization effort and business commitment to support as mentioned in the reference. In general, wireless access radio incorporates the physical and data link layers only. The reference never discloses the structure or purpose of claim 1 and does not describe that the common core network is based on a link layer or network layer.

Furthermore, Fig. 3 of the present application shows many of the important features in the present invention. This includes the two important functional entities within the common core network, namely the resource manager 46 and the mobility manager 47. These are primarily responsible for traffic distribution and mobility related issues. Since the object of the present invention is to integrate various access techniques to obtain a common configuration, this integration improves the efficiency and makes it easier for mobile users to receive their services. In order to achieve this object, the configuration must accomplish the resource management that adjust the distribution of traffic within the system and a mobility management that supports roaming mobile hosts. These two managers and their functions are now described in the first paragraph of claim 1.

The present invention also intends to utilize basic functions of the common core network 42 such as best effort, real-time, and adaptation, which enables radio links to support IP packets with QoS parameters varying to some degrees which are implemented in the network layer. Further, the mobility manager and the resource manager and their relative relationships and the relationship between the managers and the network layer has also been described.

In view of the above comments, Applicants submit that amended claim 1 is not rendered obvious by the combination of the two references as suggested by the Examiner. Applicants submit that neither of the references teaches the present claimed invention and especially the basing of the common core network on a link layer or network layer. Further, Applicants submit that the

functions of the various managers are not shown or described in the references. In view of this, Applicants submit that claim 1 is allowable.

Claim 2 depends from claim 1 and as such is also considered to be allowable. In addition, this claim further recites the function of the micromobility management. Applicants submit that this claim is additionally allowable.

CONCLUSION

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination. In view of this, reconsideration of the rejections and allowance of all the claims are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert F. Gnuse Reg. No. 27,295 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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